

USPTO Serial Number: 10/783,169

Pannell et al.

Reply to Office Action dated February 10, 2005

Amendment to the Drawings:

Applicant has attached replacement drawings for FIGs. 1-5, which include changes to FIG. 2, FIG. 3 and FIG. 5 per the Examiner's statement. Quick connect fitting 48 is shown in greater detail in FIG. 2. In FIGs. 3 and 5, spray nozzles 58 are shown to be adjustable. In FIG. 3, clamps 54 are shown to be form-fitting to tubing 50.

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REMARKS

Applicants have amended the drawings as per the Examiner's statement. No new matter is believed to be made by the above amendments to the drawings. The objection to the drawings is believed to be overcome.

The Office Action rejects claims 1, 4-9, 12, 13, 16-21, 24-26, 28, 29, 31, 33, 34, and 36 under 35 U.S.C. 102(b) as being anticipated by Smagac et al. (5,165,482). Applicants have amended claim 1 to more clearly distinguish over the prior art reference. Claim 1, as amended, recites a chemical distribution system. The system comprises a first portion of tubing affixed along an exterior surface of a dwelling. A second portion of tubing is affixed along structures external to the dwelling, the second portion of the tubing being connected to the first portion of tubing. A plurality of outlets is coupled to the first and second portions of tubing for dispensing a chemical solution having properties of killing living organisms. A ready-disconnect mechanism has a first end coupled for receiving the chemical solution and a second end coupled to the first or second portions of tubing. The ready-disconnect mechanism can readily disengage a source of the chemical solution from the first or second portions of tubing.

The Smagac reference does not teach or suggest a chemical distribution system for a chemical solution having properties of killing living organisms. The Smagac reference teaches a distribution system for delivering water or water-based fire retardant material. Smagac does teach a system where potentially hazardous chemicals are applied, as many features of the Smagac delivery system are permanent to the system and not removable. Features such as a holding tank (7) which is

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designed to hold water or recovered water from rain or recycled from the system itself may not be viable in the present application. In contrast, applicant teaches a chemical distribution system where substances such as pesticides and herbicides may be quickly and safely applied by a delivery truck. Many of these substances may be subject to strict regulatory control. As a result, permanent storage of chemicals in a residential application may not be proper.

In addition, the Smagac reference does not teach a system which includes a connector or mechanism adapted for ready disconnect from the chemical solution. The Smagac reference teaches a holding tank (7) coupled to a pressure tank (9) with recovery pipes. Sprinklers (15, 17) are coupled to the pressure tank via supply pipes (18-20, 24). The supply pipes are not connectors for purposes of the present application. The supply pipes simply couple the sprinklers to the pressure tank. The recovery pipes couple the holding tank with the pressure tank. The recovery pipes permanently connect the holding tank with the pressure tank. The supply pipes permanently connect the sprinklers to the pressure tank. Smagac does not teach a connector which is adapted to allow a source of chemical solution to readily disconnect from the system. It is most difficult for a user to quickly disconnect either the supply pipes or recovery pipes from the holding tank or pressure tank, quickly connect them to an external source, and finally, quickly disconnect them from the external source.

In contrast, Applicants use a distribution system which teaches a truck carrying the chemical solution quickly connecting to the distribution system, applying the chemical solution using the system, and disconnecting from the system.

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The truck accesses the distribution through the connector, which can swivel upwards to receive a hose from the distribution truck. The connector can have a quick disconnect mechanism to allow the truck to quickly engage the distribution system. Once the chemical has been applied using the system, the truck can quickly disengage from the system. The Smagac reference could not possibly anticipate such a system. The Smagac reference teaches away from such a system. Holding tank (7) and pressure tank (9) are intended to be a permanent fixture to the Smagac system. Again, in contrast, in the current application it is likely infeasible for such a storage tank containing hazardous chemicals to be permanently affixed to a distribution system as taught by Smagac.

Claim 1 is believed to patentably distinguish over the Smagac reference. Claims 2-11 are believed to be in condition for allowance as each is dependent from an allowable base claim.

Applicants have amended claim 12 to help distinguish over the prior art reference. Claim 12, as amended, recites a fixed chemical application system. The system comprises a tubing fixed to an exterior surface. A plurality of outlets are inserted into the tubing for dispensing a chemical solution having properties of killing living organisms. A ready-disconnect mechanism has a first end coupled for receiving the chemical solution and a second end coupled to the tubing for pumping the chemical solution through the tubing. The mechanism can quickly disengage a source of the chemical solution from the tubing.

Claim 12 is believed to patentably distinguish over the Smagac reference. Smagac does not teach or suggest a ready-disconnect mechanism which allows the connector and associated tubing to quickly disengage from a source of the chemical

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solution. Claims 13-19 are believed to be in condition for allowance as each is dependent from an allowable base claim.

Applicants have amended claim 20 to help distinguish over the prior art reference. Claim 20, as amended, recites a method of dispensing a chemical solution having properties of killing living organisms. The method comprises connecting a source of the chemical solution to one end of a tubing which is affixed to exterior surfaces. The tubing is adapted for ready disconnect from a source of the chemical solution. Chemical solution is pumped through the tubing for dispensing the chemical solution from the outlets.

Claim 20 is believed to patentably distinguish over the Smagac reference. Smagac neither teaches nor suggests a ready-disconnect connector to allow the tubing to quickly disengage from a source of the chemical solution. Claims 21-27 are believed to be in condition for allowance as each is dependent from an allowable base claim.

Applicants have amended claim 28 to help distinguish over the prior art reference. Claim 28, as amended, recites a method of applying a chemical solution having properties of killing living organisms through a fixed chemical distribution system. The system comprises installing a fixed chemical distribution system on a property, the installation including the step of affixing a tubing having a plurality of outlets to exterior surfaces in and around the property. The system further includes pumping the chemical solution through the tubing to dispense the chemical solution to target areas on the property, and disconnecting the chemical solution from the tubing.

Claim 28 is believed to patentably distinguish over the

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Smagac reference. Smagac neither teaches nor suggests a system where the tubing is quickly disengaged from the chemical solution, once applied. Claims 29-32 are believed to be in condition for allowance as each is dependent from an allowable base claim.

Applicants have amended claim 33 to help distinguish over the prior art reference. Claim 33, as amended, recites a method of applying a chemical solution having properties of killing living organisms. The method comprises connecting a source of the chemical solution to a fixed chemical distribution system installed on a property. The fixed chemical distribution system includes a tubing having a plurality of outlets and is affixed to exterior surfaces on the property. The method further includes pumping the chemical solution through the tubing to dispense the chemical solution to target areas on the property. Finally, the method further includes disconnecting the source of the chemical solution from the fixed chemical distribution system.

Claim 33 is believed to patentably distinguish over the Smagac reference. Again, Smagac neither teaches nor suggests a method where the tubing is quickly disengaged from the chemical solution. Claims 34-37 are believed to be in condition for allowance as each is dependent from an allowable base claim.

The Office Action rejects claims 2, 3, 14, 15, 22, 23, 30, and 35 under 35 U.S.C. 103(a) as being unpatentable over Smagac et al. (5,165,482) in view of Valiant (4,175,703). Claims 2, 3, 14, 15, 22, 23, 30 and 35 are believed to be in condition for allowance as each is dependent from an allowable base claim.

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The Office Action rejects claims 10, 27, 32, and 37 under 35 U.S.C. 103(a) as being unpatentable over Smagac et al. (5,165,482). Claims 10, 27, 32, and 37 are believed to be in condition for allowance as each is dependent from an allowable base claim.

The Office Action rejects claim 11 under 35 U.S.C. 103(a) as being unpatentable over Smagac et al. (5,165,482) in view of Coles (1,235,657). Claim 11 is believed to be in condition for allowance as it is dependent from an allowable base claim.

Applicants believe that all information and requirements for the application have been provided to the USPTO. If there are matters that can be discussed by telephone to further the prosecution of the Application, Applicants invite the Examiner to call the undersigned attorney at the Examiner's convenience.

The Commissioner is hereby authorized to charge any fees due with this Response to U.S. PTO Account No. 17-0055.

Respectfully submitted,
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